

ABSTRACT

The present invention aims at providing an airgap type etalon having a higher degree of design freedom of a wavelength-temperature characteristic so that such a wavelength-temperature characteristic can be freely adjusted, and at providing an apparatus utilizing such an etalon. To this end, the airgap type etalon of the present invention is constituted to comprise: a fixing block having one flat surface; a transparent parallel flat plate having parallel flat surfaces formed with an antireflection coating and a reflection augmenting coating thereon, respectively, the flat surface at the antireflection coating side being joined to the flat surface of the fixing block; a parallel flat spacer having a thickness greater than that of the transparent parallel flat plate and an expansion coefficient different from that of the transparent parallel flat plate, one of flat surfaces of the parallel flat spacer being joined to the flat surface of the fixing block; and a transparent flat plate having opposite flat surfaces formed with an antireflection coating and a reflection augmenting coating thereon, respectively, the flat surface at the reflection augmenting coating side being joined to the other of the flat surfaces of the parallel flat spacer; wherein a Fabry-Perot interferometer is formed based on an airgap positioned between the flat surface of the transparent parallel flat plate and the flat surface of the transparent flat plate which flat surfaces face to each other.